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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,237	08/26/2003	Kazunori Yamanaka	031031	1743
23850	7590	06/21/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			LEE, BENNY T	
1725 K STREET, NW				
SUITE 1000			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20006			2817	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

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This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 14 March 2005 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-21 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-19; 20, 21 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

SN 647237

EXAMINER'S ACTION

Art Unit: 2817

The disclosure is objected to because of the following informalities: Page 3, penultimate line, note that “to attain small in size and lower in loss” should be rephrased for a better description. Page 5, 23th line, note that --parallelepiped-- is the correct spelling. Page 6, line 2, note that --, respectively-- should follow “face” for clarity of description. Page 7, line 4, note that “and it can be used” appears to be an incomplete recitation which needs clarification; last line note that --(e.g. in Fig. 2A)-- should follow “101” for clarity. Page 8, line 3, note that “a lump of the MgO” remains vague in meaning and needs clarification. In the replacement paragraph to page 11, line 13, note that “bent” should be rewritten as --bend-- at each occurrence therein. In general, at all occurrences throughout the specification, “bent” should be rewritten as --bend--. Note that reference labels (111, 112, X, Y, Z) need description relative of --fig. 3--. Similarly, note that reference labels (211, 212) need description relative to --Fig. 4--.

Appropriate correction is required.

Claims 1-19; 20, 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 20, note that “four or more faces of said block” does not appear consistent with the earlier recitation of “the (single) face”. Clarification is needed.

In claim 2, note that the claim recitation does not appear to properly describe the bend structure. Note that as is evident from fig. 4, the bend structure requires that at least the first and second MgO blocks be connected or attached to each other. This situation does not appear to be reflected in the claim recitation. Clarification is needed.

Art Unit: 2817

Claim 15 contains the trademark/trade name Kovar and Invar. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe and, accordingly, the identification/description is indefinite.

The following claims have been found objectionable for reasons set forth below:

In claim 2, last two paragraphs, note that there appears to be a double recitation of the superconducting film covering the second MgO block. Note that in the penultimate paragraph, superconducting film is recited as being disposed on said surface of the second MgO block whereas in the last paragraph, the superconducting film “comes in contact” with the second MgO block. Clarification is needed. Moreover, note that “bent” should be rewritten as --bend-- at each occurrence.

In claim 5, note that “formed” should be rewritten as --provided-- for a better characterization.

In claims 6, 9, 15, note that “any one kind or more” should be rephrased in a proper Markush format or some proper alternative wording.

In claims 11, 12, note that “made” should be rewritten as --comprised-- for a better characterization.

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In claim 20, note that “preparing to prepare” and “forming to form” should be rephrased for a proper characterization.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kintaka et al in view of Matsuura et al (of record).

Kintaka et al (Fig. 9) discloses six sided dielectric block having each surface coated by a superconductive layer to define and enclosed dielectric waveguide or resonator. Note that Kintaka et al differs from the claimed invention in that particular material properties have not been provided.

Matsuura et al provides as an exemplary teaching the use of a superconductive (e.g. YBCO) layer (formed by sputtering col. 6, l. 20) which has a c-plane crystal orientation aligned parallel to a (100) surface of an MgO substrate.

Accordingly, in view of the exemplary teaching of Matsuura et al, it would have been obvious to have modified the dielectric block and superconductive layers in Kintaka et al to have been (100) MgO and a c-axis oriented YBCO layer, respectively. Such modifications would have been considered obvious since the use of an c-axis orientation reduces the penetration depth, thus providing stable band pass characteristics (e.g. see col. 7, ls 58-61 in Matsuura et al), thereby suggesting the obviousness of such a modification.

Applicant's arguments with respect to claims 1, 3, 7, 8, 10-12, 21 are have been considered but are moot in view of the new ground(s) of rejection.

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Claims 2, 4-19 are would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

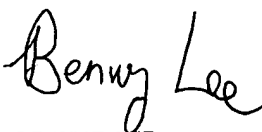
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (571) 272-1764.

Lee/ds

06/10/05

  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817